Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-12 and 29-45 are pending in the application, with claims 1, 29, 33, and 38 being the independent claims. Claims 13-28 and 46 were previously withdrawn from consideration in the present application pursuant to a Restriction Requirement issued March 2, 2010. Claims 1, 4, 5, 29, 33, and 38 are sought to be amended. Support for the amendments is found at least at, for example, paragraphs [0015], [0019], [0020], [0036], [0047], [0049], [0056] - [0058], [0061], [0065], [0069], [0088] and [0094] and FIGs. 2, 4, 5, and 10 and originally-filed claims 4, 5, 13, and 38 of Publication No. 2005/0223242 A1 to Satyajit NATH (alternatively, "the Specification"). These amendments should be entered after final because they merely clarify implicit features, do not require further search or consideration by the Examiner, and they place the claims in better condition for allowance and/or reduce the issues for appeal.

Applicant reserves the right to prosecute similar or broader claims, with respect to the withdrawn and amended claims, in the future.

These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicant respectfully requests that the Examiner reconsider all outstanding rejections and that they be withdrawn.

Statement of Substance of Examiner Interview

Further to the Interview Summary mailed December 23, 2010, Applicant submits the following Statement of Substance of Interview conducted between the Examiner and Applicant's representative, Randall K. Baldwin on December 20, 2010. Applicant's representative gratefully acknowledges the courtesies extended by the Examiner in granting a telephone interview on December 20, 2010. In the interview, the Examiner clarified his comments regarding his interpretation of the teachings of the applied references. In particular, the Examiner clarified his comments regarding the rejections of independent claims 1, 29, 33, and 38 under 35 U.S.C. § 103. During the interview, the Examiner also clarified his comments regarding the claims and the Examiner's interpretation of the teachings of Merriam and Pensak. Applicant's representative discussed distinctions between independent claims 1, 29, 33, and 38 and the applied references. Applicant's representative also discussed with the Examiner proposed amendments to claim 1 to convey the aforementioned distinction between the applied references, but no specific agreement was reached. The substance of the discussion and arguments in the telephone interview is included in the present remarks.

The Examiner is thanked for the indication, in paragraph 4 on page 2 of the Office Action, that the rejection of claims 20, 30, and 32-44 under 35 U.S.C. § 101 has been withdrawn. The Examiner is also thanked for the indication, in paragraph 5 on page 2 of the Office Action, that the rejection of claims 38-44 under 35 U.S.C. § 102(a) as being anticipated by a conventional CD stored text data has been withdrawn.

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Rejections under 35 U.S.C. § 103

Claims 1-3 and 33-41

Claims 1-3 and 33-41 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Pat. No. 6,915,435 to Merriam ("Merriam") in view of U.S. Pat. No. 6,289,450 to Pensak *et al.* ("Pensak"). Applicant respectfully traverses this rejection for the reasons stated below.

As discussed during the aforementioned telephonic interview, merely in order to expedite prosecution and without conceding the propriety of any rejection, Applicant has herein amended claims 1, 33, and 38. Applicant respectfully submits that there are a number of technical differences between the applied references and amended independent claims 1, 33, and 38.

Claims 1, 33, and 38 recite features that distinguish over Merriam and Pensak. For example, claim 1 as amended herein recites, *inter alia*:

cryptographically associating, by encrypting at least a portion of the electronic document using a cryptographic key, the document retention policy with the electronic document, wherein the cryptographic key is a document retention key or a key encrypted with a document retention key, and wherein the cryptographic key is protected by a document access policy comprising access rules which provide restrictive access to the cryptographic key and the electronic document.

Also, for example, claim 33 as amended herein recites, among other features:

wherein the cryptographic key pairs are protected by a document access policy comprising access rules which provide restrictive access to the cryptographic key pairs and the electronic files;

And

wherein the secured electronic file was previously cryptographically associated with the retention policy by encrypting at least a portion of the secured electronic file using the public key of the at least one of the cryptographic key pairs pertaining to the retention policy, and at the time the electronic file was so secured, the future event was unscheduled.

Further, for example, amended claim 38 recites, inter alia:

instructions to cryptographically associate, by using a cryptographic key to encrypt at least a portion of the electronic data, the data retention policy with the electronic data, wherein the cryptographic key is a document retention key or a key encrypted with a document retention key, and wherein the cryptographic key is protected by a document access policy comprising access rules which provide restrictive access to the cryptographic key pairs and the electronic data.

With reference to previously pending claim 1, the Examiner alleges, which Applicant does not acquiesce to, that Merriam discloses "cryptographically associating, using a cryptographic key, the document retention policy with the electronic document, wherein the cryptographic key is a document retention key or a key encrypted with a document retention key." (Office Action, page 4).

Even assuming *arguendo* that the Examiner's characterization of Merriam is correct, which Applicant does not concede, Merriam fails to teach or suggest at least "cryptographically associating, by encrypting at least a portion of the electronic document using a cryptographic key, the document retention policy with the electronic document, wherein the cryptographic key is a document retention key or a key encrypted with a document retention key," as recited, using respective similar language, in claims 1, 33, and 38. Merriam describes that "information retention policies . . . under which information sets are systematically deleted from the system . . . set forth criteria for determining if and when an information set is to be deleted, and [these policies] are often time-based, such that an information set is deleted after having been in the system for a

certain amount of time" (Merriam, col. 1, lines 10-17). Merriam discloses a "retention manager" that implements "a predetermined information retention policy," wherein the "policy sets forth the criteria for determining if and when an information set is to be purged from the information system" (Merriam, col. 6, lines 14-26). Although Merriam further discloses that an "information manager 110 encrypts (214) the information set using the selected key, and then stores (216) the encrypted information set 120 into one or more of the persistent information repositories" (Merriam, col. 5, lines 11-14 and FIGs. 1 and 2), nowhere does Merriam teach or suggest at least the above-quoted distinguishing features of claims 1, 33, and 38. Cryptographic operations in Merriam's system are limited to encryption of "the information set" itself (Merriam, col. 4, lines 12-14 and col. 5, lines 11-14).

Merriam further discloses that "only the encrypted form of the information set 120 is persistently stored within the information system" in order to preserve "the integrity of the information retention policy" (Merriam, col. 5, lines 24-36). In Merriam's system, "the term "information set"" is "any type of information, including but not limited to files, messages, web pages, communications, cryptographic keys, access codes, etc." (Merriam, col. 3, lines 22-26). However, Merriam explicitly discloses that "if one or more information sets need to be purged, then the retention manager 116 *deletes* (306) *from the key repository 114 the key*(s) associated with the encrypted versions of those information set(s) 120." (Merriam, col. 6, lines 31-34) (emphasis added). Instead of deleting keys from the key repository, claims 1, 33, and 38 as amended herein recite, using respective language, "wherein the cryptographic key pairs are protected by a document access policy comprising access rules which provide

restrictive access to the cryptographic key pairs and the electronic files." In contrast, Merriam discloses that the retention manager deletes keys associated with encrypted versions of information sets from its key repository. (Merriam, col. 6, lines 31-34). According to Merriam's system, "the retention manager 116 is responsible for implementing an information retention policy to determine which keys to delete from the key repository 114." (Merriam, col. 4, lines 22-25). Merriam's information sets comprising "encrypted information 120" are clearly separate from the "key repository 114" (Merriam, FIG. 1). While Merriam discloses that keys in the "key repository 114" may be "associated with the encrypted versions of . . . information set(s) 120" (Merriam, col. 6, lines 31-34), Merriam is silent regarding "wherein the cryptographic key is protected by a document access policy comprising access rules which provide restrictive access to the cryptographic key and the electronic document," as recited, using respective similar language, in claims 1, 33, and 38.

Moreover, as acknowledged by the Examiner, "Merriam does not disclose that the cryptographic key is protected by a document access policy." (Office Action, page 5). Rather, the Examiner relies on Pensak to cure the acknowledged deficiencies of Merriam. The Examiner asserts, which Applicant does not concede, that Pensak discloses "an information security architecture whereby electronic documents can only be decrypted by authorized users" and "associating a portion of an encrypted document with a decryption key, and devising policies that restricts access to the decrypted document based on the group membership of the requestor." (*Id.*).

Applicant respectfully disagrees with the Examiner's characterization of Pensak.

Even assuming for the sake of argument that Pensak and Merriam can be properly

combined in the manner suggested by the Examiner, which Applicant does not concede, nowhere does Pensak teach or suggest at least "wherein the cryptographic key is protected by a document access policy comprising access rules which provide restrictive access to the cryptographic key and the electronic document," as recited, using respective similar language, in claims 1, 33, and 38.

Further, Pensak is not used by the Examiner to teach, nor does Pensak teach or suggest, at least "cryptographically associating, by encrypting at least a portion of the electronic document using a cryptographic key, the document retention policy with the electronic document, wherein the cryptographic key is a document retention key or a key encrypted with a document retention key," as recited, using respective similar language, in claims 1, 33, and 38.

Thus, neither Merriam nor Pensak, taken alone or in the allegedly obvious combination, teach or suggest the above-noted distinguishing features recited in claims 1, 33, and 38 Therefore, the allegedly obvious combination of Merriam and Pensak cannot be used to establish a *prima facie* case of obviousness for claims 1, 33, and 38.

Claims 2 and 3 depend from claim 1, and the same arguments above directed to claim 1 apply equally to these dependent claims. See *In Re Fine*, 837 F.2d 1071 (Fed. Cir. 1988) and M.P.E.P. § 2143.03.

Dependent claims 34-37 depend from claim 33, and the same arguments above directed to claim 33 apply equally to these claims. Also, claims 39-44 are similarly not rendered obvious by the applied reference for the same reason as independent claim 38, from which they depend, and further in view of their own respective features.

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Therefore, Pensak cannot cure the deficiencies of Merriam, and cannot be used to establish a *prima facie* case of obviousness with regards to claims 1-3 and 33-41. Accordingly, Applicant respectfully requests that the rejection of claims 1-3 and 33-41 under U.S.C. § 103(a) be reconsidered and withdrawn.

Claims 4-8 and 45

Claims 4-8 and 45 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Merriam in view of Official Notice by the Examiner. Although the Examiner at page 11 of the Office Action states that "[a]s per claims 4-8 and 45, the rejection of claim 2 under 35 U.S.C. § 102(e) as allegedly being anticipated by [U.S. Pat. No. 6,915,435 to] Merriam is incorporated herein," during the aforementioned telephonic interview, it was clarified that the Examiner meant to state "under 35 USC 103(a)." As noted on page 4 of the Office Action and in the Examiner's interview summary dated December 23, 2010, "claim 2 is in fact rejected under 103(a) over Merriam in view of [U.S. Pat. No. 6,289,450 to] Pensak."

Applicant respectfully traverses this rejection for the reasons stated below. The Examiner acknowledges that "Merriam does not disclose a network accessible resource whereby the resource determines if a condition has occurred based on a future event description transmitted over the Internet." (Office Action, page 11).

The Examiner acknowledges that "Merriam does not disclose a network accessible resource whereby the resource determines if a condition has occurred based on a future event description transmitted over the Internet." (Office Action, page 11). However, the Examiner takes Official Notice that it is well known "to distribute process handling to remote systems" and "[t]his concept is known as distributive processing."

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(*Id.*). In support of the Official Notice of distributive processing taken by the Examiner in the rejections of claims 4-8 and 45, the Examiner has cited U.S. Pat. No. 6,353,859 to McKeehan *et al.* ("McKeehan"), U.S. Pat. No. 6,185,612 to Jensen *et al.* ("Jensen") and Wikipedia "Remote Procedure Call" (Office Action, pages 2-3 and 12-13). However, as discussed during the aforementioned interview, without acquiescing to the rejection, Applicant has amended claims 4 and 5 to recite, *inter alia*:

wherein the determining comprises interacting with a network accessible resource, wherein the network accessible resource is one or more of a server, an application, a client computing device, or a storage device

And

wherein the determining comprises interacting with a web accessible resource, wherein the web accessible resource is one or more of a web server, an application, a client computing device, or an external storage device,

respectively.

As discussed during the interview, Applicant respectfully submits that the abovenoted features of claims 4 and 5 are not taught or suggested by the applied references, singly, or in the allegedly obvious combination. Applicant further submits that the above-noted features of claims 4 and 5 are not taught or suggested by the Examiner's official notice of distributive processing. For this reason, claims 4 and 5 should be found allowable over the applied references.

Claim 45 depends from claim 4 and the comments above directed to claim 4 apply equally to this dependent claim.

Further, at least based on their respective dependencies to claim 1, claims 4-8 and 45 should be found allowable over the applied references, as well as for their additional

distinguishing features. For this additional reason, claims 4-8 and 45 should be found allowable over the applied references.

Accordingly, Applicant requests that the rejection of claims 4-8 and 45 under U.S.C. § 103(a) be removed.

Claims 9-12, 29-32, and 42-44

Claims 9-12, 29-32 and 42-44 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Merriam in view of Pensak and in further view of U.S. Pat. No. 7,249,251 to Todd *et al.* ("Todd"). Applicant respectfully traverses this rejection for the reasons stated below.

Independent claim 29 as amended herein recites, among other features:

identifying, by the computing device, a document retention period having been cryptographically associated with the secured electronic document by encrypting at least a portion of the secured electronic using the document retention key and, the document retention period being dependent on a future event that was unscheduled when the document retention period was associated with the secured electronic document, wherein the document retention key is protected by a document access policy comprising access rules which provide restrictive access to the cryptographic key and the secured electronic document[.]

The Examiner concedes that "Merriam does not disclose the document retention policy specifies a document retention period based on the future event; wherein the document retention policy specifies a document retention periods that expires a predetermined period of time after the occurrence of the future event; and permitting the deactivating step to be overridden so that the electronic document can remains accessible even after the document retention period." (Office Action, page 14). Todd does not cure the acknowledged deficiencies of Merriam. Todd discloses that "it may be desirable to

reduce the length of a previously defined retention period for a unit of data . . . it may be desirable to establish an event based retention period, wherein data is retained until a specified period after the occurrence of an event." (Todd, col. 6, lines 53-58). Todd further discloses that "a unit of data may include as content an x-ray of a patient that is desired to be maintained until a specified period of time (e.g., two years) after the patient's death." (Todd, col. 6, lines 58-61). Todd further discloses that "modifying a retention period based on the occurrence of an event may be performed by renewing previously defined retention periods until the event occurs" and "[t]he retention period for an entire class of data units may be changed by altering the retention period specified for the class." (Todd, col. 7, lines 20-23 and 44-46). Todd describes modifying and altering retention periods for data units. However, Todd is not stated by the Examiner to teach, nor does it teach or suggest, at least "a document retention period associated with the document retention key, the document retention period being dependent on a future event that was unscheduled when the document retention period was associated with the secured electronic document, wherein the document retention key is protected by a document access policy comprising access rules which provide restrictive access to the cryptographic key and the secured electronic document," as recited in claim 29.

Similarly, Todd lacks any teaching or suggestion of "wherein the cryptographic key is a document retention key or a key encrypted with a document retention key, and wherein the cryptographic key is protected by a document access policy comprising access rules which provide restrictive access to the cryptographic key and the electronic document," as recited, using respective language, in claims 1 and 38.

At least based on their respective dependencies to claim 29, claims 30-32 should be found allowable over the applied references, as well as for their additional distinguishing features.

Claims 9-12 and 42-44 depend from claims 1 and 39, respectively, and the same arguments above directed to claims 1 and 39 apply equally to claims 9-12 and 42-44.

Therefore, Todd cannot cure the deficiencies of Merriam, and cannot be used to establish a *prima facie* case of obviousness with regards to claims 9-12. Accordingly, Applicant requests that the rejection of claims 9-12, 29-32, and 42-44 under U.S.C. § 103(a) be removed.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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